

Sub 708
Q4

21. (New) A method of modulating costimulation of human T lymphocytes comprising: contacting a human T lymphocyte with an 8F4 modulator selected from the group consisting of an 8F4 polypeptide and a monoclonal antibody that recognizes a human 8F4 polypeptide, wherein said 8F4 polypeptide:

- a) is an inducible T cell costimulatory molecule;
- b) occurs on two-signal-activated human T lymphocytes;
- c) exhibits a molecular weight of about 55 to 60 kilodaltons as determined by non-reducing sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE); and
- d) is a dimer of two peptide chains exhibiting molecular weights of about 27 kilodaltons and 29 kilodaltons, as measured by reducing SDS-PAGE, such that costimulation of the human T lymphocyte is modulated.

22. (New) The method of claim 21, wherein the costimulation of human T lymphocytes is inhibited.

23. (New) The method of claim 21, wherein the 8F4 modulator is a monoclonal antibody that recognizes a human 8F4 polypeptide.

24. (New) The method of claim 22, wherein the 8F4 modulator is a monoclonal antibody that recognizes a human 8F4 polypeptide.

Sub 709
Q9

25. (New) The method of claim 23 or 24, wherein the monoclonal antibody recognizes the human 8F4 polypeptide of about 55 kilodaltons to 60 kilodaltons, as determined by non-reducing SDS-PAGE.

26. (New) The method of claim 23 or 24, wherein the monoclonal antibody recognizes the peptide chain of about 27 kilodaltons, as determined by reducing SDS-PAGE.

6/27
9/4
SUB
D 9
D 10

27. (New) The method of claim 23 or 24, wherein the monoclonal antibody recognizes the peptide chain of about 29 kilodaltons, as determined by reducing SDS-PAGE.

28. (New) The method of claim 23 or 24, wherein the monoclonal antibody recognizes a human 8F4 polypeptide present on activated human CD4⁺ T lymphocytes and activated human CD8⁺ T lymphocytes.

29. (New) The method of claim 21 or 22, wherein the 8F4 modulator is an 8F4 polypeptide.

SUB
D 10

30. (New) A method of inhibiting rejection of an organ transplant, comprising: administering to an individual in need of such inhibition an 8F4 inhibitory molecule selected from the group consisting of an 8F4 polypeptide and a monoclonal antibody that recognizes a human 8F4 polypeptide, wherein said 8F4 polypeptide:

- a) is an inducible T cell costimulatory molecule;
 - b) occurs on two-signal-activated human T lymphocytes;
 - c) exhibits a molecular weight of about 55 to 60 kilodaltons as determined by non-reducing sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE); and
 - d) is a dimer of two peptide chains exhibiting molecular weights of about 27 kilodaltons and 29 kilodaltons, as measured by reducing SDS-PAGE,
- in an amount sufficient to inhibit rejection of an organ transplant.

31. (New) The method of claim 30, wherein the 8F4 inhibitory molecule is a monoclonal antibody that recognizes a human 8F4 polypeptide.

SUB
D 11

32. (New) The method of claim 31, wherein the monoclonal antibody recognizes the human 8F4 polypeptide of about 55 kilodaltons to 60 kilodaltons, as determined by non-reducing SDS-PAGE.